

AMENDMENTS TO THE CLAIMS

1. (Currently amended) An electric lamp, consisting essentially of:
  - a) a lamp envelope having an inner surface;
  - b) means within the lamp envelope for generating ultraviolet radiation;
  - c) a layer of a luminescent material adjacent the inner surface of the lamp envelope for generating visible light when impinged by said ultraviolet radiation; and
  - d) a reflective layer, said reflective layer being disposed between said inner surface of said lamp envelope and said layer of luminescent material, for reflecting ultraviolet radiation which has passed through said layer of luminescent material back into said luminescent material for increasing the visible light output of said luminescent material, said reflective layer consisting essentially of a mixture of particulate non-fluorescent oxidic material and a getter material comprising a thermally decomposed getter precursor which reacts with contaminants present in the lamp, said getter material being formed upon thermal decomposition of ~~[[a]]~~ the getter precursor material during lehring (sintering).
2. (Currently amended) A lamp according to claim 1, wherein said the reflective layer comprises a particulate aluminum oxide and a getter of an oxide of zinc or an alkaline earth metal or mixtures thereof formed by exposing the particulate aluminum oxide and an effective amount of a precursor of the zinc or alkaline earth metal oxide to the sintering.
3. (Previously presented) A lamp as claimed in claim 2, wherein said reflective layer is sintered just prior to the envelope being sealed during manufacture of said lamp.
4. (Previously presented) A lamp as claimed in claim 2, wherein said getter material includes an oxide of zinc or an alkaline earth metal-selected from the group consisting of magnesium, calcium, strontium, barium, and mixtures thereof.
5. (Currently amended) A lamp as claimed in claim 4, wherein said sintered mixture ~~is derived from~~ comprises a thermal decomposition of a soluble precursor

compound of the zinc or the alkaline earth metal oxide or mixtures thereof in an aqueous suspension of aluminum oxide.

6. (Original) A lamp as claimed in claim 4, wherein said getter material is magnesium oxide.

7. (Original) A lamp as claimed in claim 2, wherein said layer of luminescent material comprises a halophosphate phosphor.

8. (Previously presented) A lamp as claimed in claim 7, wherein said getter material includes an oxide of zinc or an alkaline earth metal selected from the group consisting of magnesium, calcium, strontium, barium and mixtures thereof.

9. (Previously presented) A lamp as claimed in claim 8, wherein said sintered mixture is derived from a soluble precursor material of zinc oxide or an alkaline earth metal and mixtures thereof in an aqueous suspension of aluminum oxide.

10. (Previously presented) A lamp according to claim 1, wherein said means for generating ultraviolet radiation comprises a filling of an ionizable material a rare gas and a pair of discharge electrodes between which a discharge takes place during lamp operation.

11. (Previously presented) A lamp according to claim 10, wherein the pair of discharge electrodes are each adjacent a respective sealed end of said discharge vessel.

12. (Currently amended) A low pressure mercury vapor fluorescent lamp, comprising:

- a) a tubular, light transmissive lamp envelope having opposing sealed ends and an inner tubular surface;
- b) a filling of mercury and a rare gas;
- c) a pair of discharge electrodes each arranged at a respective sealed end of said lamp envelope;

c) means for connecting said discharge electrodes to a source of electric potential outside of said lamp envelope, whereby during lamp operation a gas discharge is maintained between said discharge electrodes, which gas discharge emits ultraviolet radiation;

d) a single, ~~light transmissive and ultraviolet radiation~~ reflecting layer disposed on said inner surface of said lamp envelope, said single reflecting layer consisting essentially of a sintered mixture of an aluminum oxide material and a getter material which reacts with contaminants present in the lamp; and

e) ~~a layer~~ a layer of luminescent material disposed on ~~said first~~ the single reflecting layer.

13. (Previously presented) A lamp as claimed in claim 12, wherein said reflecting layer comprises particulate aluminum and an oxide of zinc or an alkaline earth metal or mixtures thereof formed by lehring (sintering).

14. (Original) A lamp as claimed in claim 12, wherein said reflecting layer is sintered just prior to the envelope being sealed during manufacture of said lamp.

15. (Previously presented) A lamp as claimed in claim 14, wherein said getter material includes an oxide of zinc or an alkaline earth metal selected from the group consisting of magnesium, calcium, strontium, barium and mixtures thereof.

16. (Currently amended) A lamp as claimed in claim 15, wherein said sintered mixture ~~is derived from~~ comprises a thermal decomposition of a mixture of a soluble oxide precursor material of zinc oxide or an alkaline earth metal or mixture thereof in an aqueous suspension of aluminum oxide.

17. (Withdrawn) A method of manufacturing an electric lamp comprising:  
forming an aqueous suspension of a non-fluorescent oxidic material;  
adding a water soluble getter precursor to the aqueous suspension to form a mixture;  
forming a first coating on the inner wall surface of a lamp envelope with the mixture;

drying the first coating to form a single UV light reflective layer;  
forming a second coating of a luminescent material over the dry first coating; and  
sintering the first and second coatings to induce the water soluble getter  
precursor to convert into a gettering material.

18. (Withdrawn) A method as set forth in claim 17, comprising using a water soluble zinc or alkaline earth metal compound as the water soluble getter precursor.

19. (Withdrawn) A method as set forth in claim 17, comprising using aluminum oxide as the non-fluorescent oxidic material.

20. (Withdrawn) A method as set forth in claim 17, further comprising sealing the envelope just after the step of sintering.

21. (New) A lamp according to claim 1, wherein the reflective layer on the inner surface of the lamp envelope, is continuous and aperture free.

22. (New) A lamp according to claim 12, wherein the single light reflective layer and the layer of luminescent material which are formed on the inner surface of the lamp envelope are both continuous and aperture free.

23. (New) A lamp according to claim 1, wherein the reflective layer is disposed directly on the inner surface of the lamp envelope.

24. (New) A lamp according to claim 12, wherein the single light reflective layer is disposed directly on the inner surface of the lamp envelope and wherein the layer of luminescent material is disposed directly on the single light reflective layer.